



DESCRIPTION OF INTERNSHIP OPPORTUNITY

The Environmental Protection Agency runs an Internship Programme which aims to give students and graduates valuable experience in a variety of technical disciplines within the Public Sector. This Internship is working in the area of remote sensing and GIS within our Analytics Team. We welcome applications in the form of a cover letter and CV to be submitted as per the guidelines below.

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| Grade | Internship Programme (6 - 9 months) |
| Job Location | Analytics Team, EPA Headquarters Wexford |
| Nature of Employment | Intern Programme – 6 to 9 month contract aimed at providing a focused and enthusiastic GIS / Remote Sensing graduate with both practical and applied work experience in the Public Sector. |
| Assignment/Area of Work | The principal duties/functions and responsibilities will be within the EPA's newly formed Analytics Team implementing spatial analysis & remote sensing tasks. |
| Aim of Internship: | The aim of the internship programme is to give an enthusiastic graduate in GIS / Remote Sensing the opportunity to gain experience while also supporting the delivery of the Analytics Team's work programme. The successful applicant will be assigned a mentor and supervisor to help ensure both the Intern and the EPA get the most from the programme. |
| Responsibilities | The successful applicant will be appointed as an intern reporting to a senior remote sensing and spatial analyst. This intern role will support the delivery of the EPA's Copernicus land cover mapping tasks. |
| Duties will include | <p>Support the delivery of the following tasks under the EPA's Copernicus Landcover Programme:</p> <ul style="list-style-type: none">• Production of CORINE 2018 and associated change datasets;• Verification of European Environment Agency's (EEA) Local Components datasets (Urban Atlas, Riparian Zones and the Natura 2000 (N2K) sites);• Verification of the EEA's 2015 High Resolution Layers;• Data Dissemination;• Production of Interim & Final Reports. <p>To support the delivery of these tasks the successful applicant will be supported in developing the following skills and experience:</p> <ul style="list-style-type: none">• Using remote sensing and manual photo interpretation methods with existing in-situ data to characterise the current physical landcover in Ireland; |

- Change analysis techniques to identify landcover change between reporting periods;
- Verification using existing data and in-situ control points to ensure the quality of output data;
- Collection, collation and editing of GIS data layers;
- Data capture and verification techniques;
- Uploading data to GeoDatabases;
- Acquisition and management of imagery (multispectral, SAR, LIDAR, aerial photographs, sentinel etc.);
- Acquisition and management of in-situ data on land use and cover (e.g. forestry data);
- Producing standardised documentation of best practice procedures in relation to any of the tasks;

In addition to the support tasks above the successful applicant will get exposure to more advanced remote and spatial analysis techniques:

- Creating scripts and models using python, SQL, model builder and FME to create, integrate or transform data to meet project requirements;
- Design of remote sensing models to integrate and interpret both in-situ data and satellite imagery to produce thematic maps on landuse, landcover and habitats;
- Advanced data analytics on Ireland's key environmental challenges as identified in [Ireland's Environment 2016](#).

Qualifications (*Fitting one of the following scenarios*)

A Masters or University degree in GIS or Remote Sensing, applicants with certified training through specialised institute/schools on GIS software will also be considered.

A university degree in Environmental Sciences, Engineering or Natural Sciences (e.g. Geography, Ecology etc.). A qualification or experience in GIS / Remote Sensing would be very beneficial but is not mandatory.

Applicants wishing to do this internship as part of relevant course work experience will also be considered.

Experience

As this is an intern programme professional experience is not mandatory, however applicants will be expected to demonstrate the skills below through previous course work and other work experience:

- Experience in desktop GIS software especially ArcGIS & Q-GIS and knowledge of the associated spatial analysis tools;
- Experience in creating, editing and verifying GIS data, including a good working knowledge of GIS concepts such as co-ordinate systems, common GIS file formats and GIS topologies;
- Although not mandatory knowledge of Remote Sensing software would be beneficial;
- Strong ICT skills with an excellent working knowledge of Microsoft Office and ability to learn new systems;
- Excellent interpersonal and communication skills (both written & verbal);

- Ability to work both on own initiative or as part of a high performance team;
- Ability to organise, multi-task and prioritise to meet deadlines;
- Strong attention to detail and ability to problem solve;
- Very good English language knowledge is mandatory.

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| Salary | €367.5 per week. |
| Hours | 35hr week. |
| Duration | 6 month programme with option to extend to 9 months based on performance and agreement by both parties. We aim to start the internship in April 2018 although flexibility on starting date may be possible. |
| Annual Leave | 10 days for 6 months or 15 days if placement extended to 9 months. |
| Closing Date | Please submit Cover Letter & CV by Wednesday 7th March 2018 . Submissions tailored to requirements of role will be positively reviewed. |

Electronic Submissions or queries to g.smith@epa.ie

Or (in hardcopy) at:

Mr. Gavin Smith
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Analytics Team
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Selection Process: Interview

Further Information: www.epa.ie